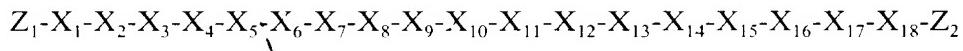


1. (Amended) An ApoA-I agonist compound comprising:
  - (i) an 18 to 22-residue D-enantiomeric peptide or peptide analogue which forms an amphipathic  $\alpha$ -helix in the presence of lipids and which comprises formula (I):



$X_1$  is D-Ala (a), Gly (G), D-Asn (n), D-Gln (q) or D-Pro (p);

$X_2$  is a D-enantiomeric aliphatic residue;

$X_3$  is D-Leu (l);

$X_4$  is a D-enantiomeric acidic residue;

$X_5$  is D-Leu (l) or D-Phe (f);

$X_6$  is D-Leu (l) or D-Phe (f);

$X_7$  is a D-enantiomeric basic residue;

$X_8$  is a D-enantiomeric acidic residue;

$X_9$  is D-Leu (l) or D-Trp (w);

$X_{10}$  is D-Leu (l) or D-Trp (w);

$X_{11}$  is a D-enantiomeric acidic residue or D-Asn (n);

$X_{12}$  is a D-enantiomeric acidic residue;

$X_{13}$  is D-Leu (l), D-Trp (w) or D-Phe (f);

$X_{14}$  is a D-enantiomeric basic residue or D-Leu (l);

$X_{15}$  is D-Gln (q) or D-Asn (n);

$X_{16}$  is a D-enantiomeric basic residue;

$X_{17}$  is D-Leu (l);

$X_{18}$  is a D-enantiomeric basic residue;

$Z_1$  is  $R_2N-$  or  $RC(O)NR-$ ;

$Z_2$  is  $-C(O)NRR$ ,  $-C(O)OR$  or  $-C(O)OH$  or a salt thereof;

each R is independently -H, ( $C_1-C_6$ ) alkyl, ( $C_1-C_6$ ) alkenyl, ( $C_1-C_6$ ) alkynyl, ( $C_5-C_{20}$ ) aryl, ( $C_6-C_{26}$ ) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl or a

1 to 7-residue peptide or peptide analogue in which one or more bonds between residues 1 through 7 are independently a substituted amide, an isostere of an amide or an amide mimetic; and

each " - " between residues  $X_1$  through  $X_{18}$  independently designates an amide linkage, a substituted amide linkage, an isostere of an amide or an amide mimetic; or

(ii) a 14 to 20-deleted D-enantiomeric peptide or peptide analogue according to formula (I) in which at least one and up to eight of residues  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$ ,  $X_5$ ,  $X_6$ ,  $X_7$ ,  $X_8$ ,  $X_9$ ,  $X_{10}$ ,  $X_{11}$ ,  $X_{12}$ ,  $X_{13}$ ,  $X_{14}$ ,  $X_{15}$ ,  $X_{16}$ ,  $X_{17}$  and  $X_{18}$  are optionally deleted; or

(iii) an 18 to 22-altered D-enantiomeric peptide or peptide analogue according to formula (I) in which at least one of residues  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$ ,  $X_5$ ,  $X_6$ ,  $X_7$ ,  $X_8$ ,  $X_9$ ,  $X_{10}$ ,  $X_{11}$ ,  $X_{12}$ ,  $X_{13}$ ,  $X_{14}$ ,  $X_{15}$ ,  $X_{16}$ ,  $X_{17}$  or  $X_{18}$  is conservatively substituted with another D-enantiomeric residue.

3. (Amended) The ApoA-I agonist compound of Claim 1 which is the altered D-enantiomeric peptide or peptide analogue according to formula (I).

4. (Amended) The ApoA-I agonist compound of Claim 3 in which the D-enantiomeric hydrophobic residues are fixed according to formula (I) and at least one non-fixed residue is conservatively substituted with another D-enantiomeric residue.

5. (Amended) The ApoA-I agonist compound of Claim 4 in which:

$X_1$  is D-Pro (p), Gly (G), D-Asn (n) or D-Ala (a);  
 $X_2$  is D-Ala (a), D-Leu (l) or D-Val (v);  
 $X_3$  is D-Leu (l);  
 $X_5$  is D-Leu (l) or D-Phe (f);  
 $X_6$  is D-Leu (l) or D-Phe (f);  
 $X_9$  is D-Leu (l) or D-Trp (w);

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$X_{10}$  is D-Leu (l) or D-Trp (w);

$X_{13}$  is D-Leu (l), D-Trp (w) or D-Phe (f);

$X_{17}$  is D-Leu (l); and

at least one of  $X_4$ ,  $X_7$ ,  $X_8$ ,  $X_{11}$ ,  $X_{12}$ ,  $X_{14}$ ,  $X_{15}$ ,  $X_{16}$  and  $X_{18}$  is conservatively substituted with another D-enantiomeric residue.

6. (Amended) The ApoA-I agonist compound of Claim 3 in which the D-enantiomeric hydrophilic residues are fixed according to formula (I) and at least one non-fixed residue is conservatively substituted with another D-enantiomeric residue.

7. (Amended) The ApoA-I agonist compound of Claim 6 in which:

$X_4$  is D-Asp (d) or D-Glu (e);

$X_7$  is D-Arg (r), D-Lys (k) or D-Orn;

$X_8$  is D-Asp (d) or D-Glu (e);

$X_{11}$  is D-Asn (n) or D-Glu (e);

$X_{12}$  is D-Glu (e);

$X_{14}$  is D-Lys (k), D-Arg (r) or D-Orn;

$X_{15}$  is D-Gln (q) or D-Asn (n);

$X_{16}$  is D-Lys (k), D-Arg (r) or D-Orn;

$X_{18}$  is D-Asn (n) or D-Gln (q); and

at least one of  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_5$ ,  $X_6$ ,  $X_9$ ,  $X_{10}$ ,  $X_{13}$  and  $X_{17}$  is conservatively substituted with another D-enantiomeric residue.

8. (Amended) The ApoA-I agonist compound of Claim 6 in which  $X_3$  is D-Leu (l),  $X_6$  is Phe (f),  $X_9$  is D-Leu (l) or D-Trp (w),  $X_{10}$  is D-Leu (l) or D-Trp (w) and at least one of  $X_1$ ,  $X_2$ ,  $X_5$ ,  $X_{13}$  and  $X_{17}$  is conservatively substituted with another D-enantiomeric residue.

9. (Amended) The ApoA-I agonist compound of Claim 5 or 7 in which the substituting D-enantiomeric residue is classified within the same sub-category as the substituted D-enantiomeric residue.
10. (Amended) The ApoA-I agonist compound of Claim 1 which is the deleted D-enantiomeric peptide or peptide analogue according to formula (I).
11. (Amended) The ApoA-I agonist compound of Claim 10 in which one or two helical turns of the D-enantiomeric peptide or peptide analogue is optionally deleted.
12. (Amended) The ApoA-I agonist compound of Claim 1 which is an 18-residue D-enantiomeric peptide or peptide analogue according to formula (I).
13. (Amended) The ApoA-I agonist compound of Claim 12 in which the “-” between residues designates -C(O)NH-;  
Z<sub>1</sub> is H<sub>2</sub>N-; and  
Z<sub>2</sub> is -C(O)OH or a salt thereof.
14. (Amended) The ApoA-I agonist compound of Claim 13, in which;  
X<sub>1</sub> is D-Ala (a), Gly (G), D-Asn (n) or D-Pro (p);  
X<sub>2</sub> is D-Ala (a), D-Val (v), or D-Leu (l);  
X<sub>3</sub> is D-Leu (l);  
X<sub>4</sub> is D-Asp (d) or D- Glu (e);  
X<sub>5</sub> is D-Leu (l) or D-Phe (f);  
X<sub>6</sub> is D-Leu (l) or D-Phe (f);  
X<sub>7</sub> is D-Arg (r), D-Lys (d) or D-Orn;  
X<sub>8</sub> is D-Asp (d) or D-Glu (e);  
X<sub>9</sub> is D-Leu (l) or D-Trp (w);  
X<sub>10</sub> is D-Leu (l) or D-Trp (w);

X<sub>11</sub> is D-Glu (e) or D-Asn (n);  
X<sub>12</sub> is D-Glu (e);  
X<sub>13</sub> D-Leu (l), D-Trp (w) or D-Phe (f);  
X<sub>14</sub> is D-Arg (r), D-Lys (k) or D-Orn;  
X<sub>15</sub> is D-Gln (q) or D-Asn (n);  
X<sub>16</sub> is D-Arg (r), D-Lys (k) or D-Orn;  
X<sub>17</sub> is D-Leu (l); and  
X<sub>18</sub> is D-Arg (r), D-Lys (d) or D-Orn.

16. (Amended) A multimeric ApoA-I agonist compound which comprises formula (II):



or a pharmaceutically acceptable salt thereof, wherein:

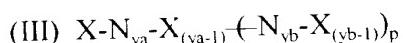
each m is independently an integer from 0 to 1;  
n is an integer from 0 to 10;  
each "HH" is independently a peptide or peptide analogue according to

Claim 1;

each "LL" is independently a bifunctional linker; and  
each " - " independently designates a covalent linkage.

17. (Amended) A multimeric ApoA-I agonist compound which comprises formula

(III):



or a pharmaceutically acceptable salt thereof, wherein:

each X is independently  $\text{HH}-\left(\text{LL}_m-\text{HH}\right)_n\text{LL}_m-\text{HH}$ ;  
each HH is independently a peptide or peptide analogue according to Claim 1;

each LL is independently a bifunctional linker;

each  $m$  is independently an integer from 0 to 1;

each  $n$  is independently an integer from 0 to 8;

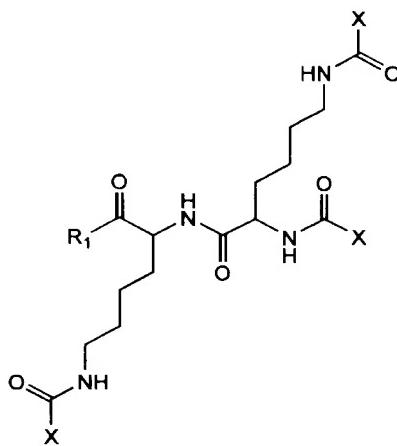
$N_{ya}$  and  $N_{yb}$  are each independently a multifunctional linking moiety where  $y_a$  and  $y_b$  represent the number of functional groups on  $N_{ya}$  and  $N_{yb}$ , respectively;

each  $y_a$  or  $y_b$  is independently an integer from 3 to 8;

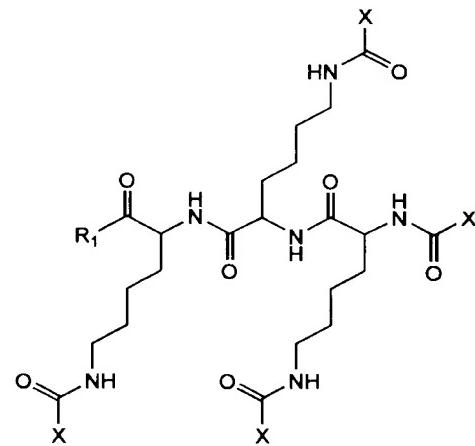
p is an integer from 0 to 7; and

each "—" independently designates a covalent bond.

18. (Amended) A multimeric ApoA-I agonist compound which comprises formula (IV) or (V):



-OR-



(IV)

(M)

or a pharmaceutically acceptable salt thereof, wherein:

each X is independently  $\text{HH} \leftarrow \text{LL}_m - \text{HH} \rightarrow_n \text{LL}_m - \text{HH}$ ;

each HH is independently a peptide or peptide analogue according to Claim 1;

each LL is independently a bifunctional linker;

each n is independently an integer from 0 to 1;  
each m is independently an integer from 0 to 8;  
 $R_1$  is -OR or -NRR; and  
each R is independently -H, ( $C_1$ - $C_6$ ) alkyl, ( $C_1$ - $C_6$ ) alkenyl, ( $C_1$ - $C_6$ ) alkynyl, ( $C_5$ - $C_{20}$ ) aryl, ( $C_6$ - $C_{26}$ ) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl.

19. (Amended) The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which the bifunctional linker is cleavable.

20. (Amended) The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which n is 0.

21. (Amended) The multimeric ApoA-I agonist compound of Claim 20 in which m is 0.

22. (Amended) The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which each HH is independently a peptide or peptide analogue according to Claim 3.

23. (Amended) The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which each HH is independently a peptide or peptide analogue according to Claim 10.

25. (Amended) An ApoA-I agonist-lipid complex comprising an ApoA-I agonist and a lipid, wherein the ApoA-I agonist is a peptide or peptide analogue according to Claim 1, a multimeric ApoA-I agonist compound according to Claim 16, a multimeric ApoA-I agonist compound according to Claim 17, or a multimeric ApoA-I agonist compound according to Claim 18.

33. (Amended) A pharmaceutical composition comprising an ApoA-I agonist and a pharmaceutically acceptable carrier, excipient or diluent, wherein the ApoA-I agonist is in the

*P-1* form of an ApoA-I agonist-lipid complex, said complex comprising an ApoA-I agonist compound and a lipid.

*N.E.* 39. (Amended) The pharmaceutical composition of Claim 33, which is in the form of a lyophilized powder.